



## INFORMATION DISCLOSURE CITATION

(Use several sheets if necessary)

ATTY DOCKET NO.

A382-USA

APPLICATION NO.

10/711,154

APPLICANT(S)

Jiang

FILING DATE

August 27, 2004

GROUP ART UNIT

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE

## U.S. PATENT APPLICATION PUBLICATIONS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE

## FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
							YES	NO
TMS		JP 2002 362972 A	04/02/2003	Japan				
TMS		JP 2001 302345 A	04/02/2002	Japan				
TMS		WO 01/80783 A2	11/01/2001	WIPO				

## OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)


EXAMINER

DATE CONSIDERED

10/05

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<b>INFORMATION DISCLOSURE CITATION</b> <i>(Use several sheets if necessary)</i>		Docket Number (Optional)		Application Number
		A382-USA		
		Applicant(s)		
		Jiang		
		Filing Date	Group Art Unit	

  

*EXAMINER INITIAL	OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)
TMS	CHUNG, T., SONG, H., KIM, G. and D.; "Microstructure and Phase Stability of Yttria-Doped Tetragonal Zirconia Polycrystals Heat Treated In Nitrogen Atmosphere", J. Am. Ceram. Soc., 80 [10] 2607-12 (1997)
TMS	DRUMMOND, L.; "In Vitro Aging of Yttria-Stabilized Zirconia"; J. Am. Ceram. Soc., 72 [4] 657-76 (1989)
TMS	KOH, Y., KONG, Y., KIM, S., KIM, H.; "Improved Low-Temperature Environmental Degradation of Yttria-Stabilized Tetragonal Zirconia Polycrystals by Surface Encapsulation", J. Am. Ceram. Soc., 82 [6] 1456-58 (1999)
TMS	GREMILLARD, CHEVALIER, EPICIER AND FANTOZZI, "Improving the Durability of a Biomedical-Grade Zirconia Ceramic by the Addition of Silica", J. Am. Ceram. Soc., 85 [2] 401-407 (2002)
TMS	DRUMMOND, J.; "Effects of In Vitro Aging of Magnesia-Stabilized Zirconia"; J. Am. Ceram. Soc., 75 [5]; 1278-1280; 1992
TMS	PICONI, C. and MACCAURO, G.; "Zirconia as a Ceramic Biomaterial", Biomaterials; 1999; 1-25; 20
TMS	LIN, J. and DUH, J.; "Crystallinity Size and Microstrain of Thermally Aged Low-Ceria and Low-Yttria-Doped Zirconia"; J. Am. Ceram. Soc., 81 [4] 853-60 (1998)
TMS	HO, F. and WEI, W.; "Dissolution of Yttrium Ions and Phase Transformation of 3Y-TZP Powder in Aqueous Solution"; J. Am. Ceram. Soc., 82 [6] 1614-16 (1999)
TMS	LI, J. and WATANABE, R.; "Phase Transformation in Y2O3-Partially-Stabilized ZrO2 Polysrystals of Various Grain Sizes during Low-Temperature Aging in Water"; J. Am. Ceram. Soc., 80 [10] 2607-12 (1997)
TMS	PICONI, C., BURGER, W., et al; "Y-TZP Ceramics for Artifical Joint Replacements"; Biomaterials 19 (1998) 1489-1494

  

EXAMINER <i>Timothy M. Speer</i>	DATE CONSIDERED <i>10/05</i>
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\*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

# ELECTRONIC INFORMATION DISCLOSURE STATEMENT

Electronic Version v18

Stylesheet Version v18.0

## Title of Invention

Material and Method to Prevent Low Temperature Degradation of  
Zirconia in Biomedical Implants

Application Number : 10/711,154

Confirmation Number:

First Named Applicant: Guangqiang Jiang

Attorney Docket Number: A382-USA

Art Unit:

Examiner:

Search string: ( 4414282 or 4536203 or 4587225 or 5021307 or 5104738 or 5648302 or 5693580  
or 5820989 or 6609013 or 20020013625 ).pn

## US Patent Documents

Note: Applicant is not required to submit a paper copy of cited US Patent Documents

init	Cite.No.	Patent No.	Date	Patentee	Kind	Class	Subclass
TMS	1	4414282	1983-11-08	McCollister			
	2	4536203	1985-08-20	Kramer			
	3	4587225	1986-05-06	Tsukidate			
	4	5021307	1991-06-04	Brow			
	5	5104738	1992-04-14	Brow			
	6	5648302	1997-07-15	Brow			
	7	5693580	1997-12-02	Brow			
✓	8	5820989	1998-10-13	Reed			
TMS	9	6609013	2000-05-30	Kwon			

## US Published Applications

Note: Applicant is not required to submit a paper copy of cited US Published Applications

init	Cite.No.	Pub. No.	Date	Applicant	Kind	Class	Subclass
TMS	1	20020013625	2002-01-31	Abouaf			

## Signature

Examiner Name	Date
Imad M. Speer	10/05